Environmental Science

Focus: Environmental Science **Grades K-4**

Background:

This lesson will describe the use of water-saving methods to reduce the amount of water for home, lawns, farming and industry and thus increasing water supplies for optimum long-term, economic and social benefits. To accompany this lesson will be a demonstration that will give some ideas how to conserve.

Objectives:

- ✓ Students will discuss the importance of water conservation.
- ✓ Students will be able to identify the different ways to conserve.
- ✓ Students will be able to describe why saving water is important.
- ✓ Children will be able to understand the difference between reusing and recycling water.

Learning outcomes:

Learning outcomes from this lesson parallel the 4th grade Ohio proficiency test.

- ✓ Select instruments, make observations and/or organize observations of an event, object or organism.
- ✓ Identify and/or compare the mass, dimensions and volume of familiar objects in standard and/or non-standard units.
- ✓ Analyze a series of events and/or simple daily or seasonal cycles and predict the next likely occurrence in the sequence.
- ✓ Evaluate a simple procedure to carry out an exploration.
- ✓ Identify and/or discuss the selection of resources and tools used for exploring scientific phenomena.
- ✓ Demonstrate an understanding of safe use of materials and/or devices in science activities.
- ✓ Identify characteristics of a simple physical change.

Lesson #1: Overview

- ✓ Introduce yourself.
- ✓ Discuss chemical term for water. What is conservation?
- ✓ Discuss ways to conserve.
- ✓ Explain the importance of water conservation.

Activity: Sponge Demo

1. Have a large clear container of water, with a black marker mark the level of water in the container.
2. Cut up sponges into several pieces.
3. Each sponge represents a different way to use water.
4. The student will give their reason for using water then place their sponge into the container and observe the water consumption.
5. Then they work in reverse and take the sponges out of the bowl designated to hold all the water used in the world.
6. Finally observe the water level and notice that it is not the same amount that it was when we started out with. Why and discuss.

http://www.epa.gov/teachers/curriculumwater.htm